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*Comment Received From: Cyrus Kangaloo*  
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## **Single Family Enhanced Air-to-Water Heat Pump Compliance Options**

To Whom It May Concern,

I am one of industry related stakeholders requesting the California Energy Commission (CEC) to approve an interim approach that allows the use of a standard efficiency heat pump for compliance instead of the AWHP inputs that greatly undervalues performance.

We can't wait for the 2022 code cycle which will be applied in 2023.  
We need the above recommendation approved now.

1. Approve an interim approach that allows Air-to-Water Heat Pumps' Title 24 compliance value to be the same as standard efficiency Air-to-Air Heat Pumps.
2. Approve Multi-Function of AWHP allowing an interim UEF of 4.0 for Domestic Hot Water Heating. The UEF can be modified as the technology matures and more data is presented.
3. When software updates permit, add the differential performance between fixed speed compressors and variable speed compressors.
4. Approve AWHP with the ductless option, except of course when the AWHP is used with a ducted system in unconditioned space.

Supporting data is found in this CASE STUDY report under review by CEC (a report that contains data):

Enhanced Air-to-Water Heat Pump Compliance Options  
([https://title24stakeholders.com/wp-content/uploads/2019/06/Res\\_2022\\_T24\\_CASE-Report\\_Draft\\_SF\\_AWHP.pdf](https://title24stakeholders.com/wp-content/uploads/2019/06/Res_2022_T24_CASE-Report_Draft_SF_AWHP.pdf))